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Water Resources NSDI Node

1:750,000-scale static ground-water levels of Nevada

Metadata:

- Identification Information
- Data Quality Information
- Spatial Data Organization Information
- Spatial Reference Information
- Entity and Attribute Information
- Distribution_Information (Get This Data Set Here!)
- Metadata Reference Information

WRD Maps and GIS Data

Get This Data Set

List of All GIS Data Sets

Identification_Information:

Citation:

Citation Information:

Originator: Susan G. Buto
Originator: Sienna Smith-Sager

Publication Date: 2006

Title:

1:750,000-scale static ground-water levels of Nevada Geospatial_Data_Presentation_Form: vector digital data

Online Linkage: http://water.usgs.gov/lookup/getspatial?nv_dtw750nv_l

Larger_Work_Citation:
Citation_Information:
Originator: Rush, F.E

Publication_Date: 1974

Title:

Static ground water levels of Nevada Geospatial_Data_Presentation_Form: map

Series Information:

Series_Name: Nevada Department of Conservation and Natural Resources,

Division of Water Resources Map *Issue_Identification:* not applicable

Description:

Abstract:

This data set consists of static ground-water levels for the State of Nevada based on a 1974 ground-water map (Rush, 1974) published by the Nevada Department of Conservation and Natural Resources, Division of Water Resources, State Engineers Office. These data were digitized from the source as part of an effort to provide statewide information on water table and depth to ground water for Nevada.

Reference Cited

Rush, F.E., 1974, Static ground water levels of Nevada: Nevada Department of Conservation and Natural Resources, Division of Water Resources map, 1 sheet, scale 1:750,000.

Purpose:

This data set was created as part of a U.S. Geological Survey study, done in cooperation with the Nevada Division of Environmental Protection, to evaluate the susceptibility and vulnerability of ground water to anthropogenic contamination. The data set was created as part of an effort to provide statewide information on depth to ground water and water-table levels in Nevada. One variable that may control the susceptibility of ground water to contamination and determines contamination transport is depth to water (Lopes and others, 2006). This data set was used to develop raster surfaces of water-table altitude and depth to

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ground water for Nevada. The intended uses of this data set include, but are not limited to,
         natural resource modeling, mapping, and visualization applications. Reference Cited Lopes,
         T.J., Buto, S.G., Smith, J.L., and Welborn, T.L., 2006, Water-table levels and gradients,
         Nevada, 1947-2004: U.S. Geological Survey Scientific Investigations Report 2006-5100, 27 p.
Time_Period_of_Content:
    Time_Period_Information:
         Single Date/Time:
              Calendar_Date: 1974
    Currentness_Reference:
         publication date
Status:
    Progress: Complete
    Maintenance_and_Update_Frequency: None planned
Spatial_Domain:
    Bounding_Coordinates:
         West Bounding Coordinate: -120.111616
         East_Bounding_Coordinate: -113.822423
         North_Bounding_Coordinate: 42.004682
         South_Bounding_Coordinate: 35.019184
Keywords:
    Theme:
         Theme_Keyword_Thesaurus: none
         Theme Keyword: Static ground-water levels
         Theme_Keyword: Depth to ground water
         Theme Keyword: inlandWaters
    Place:
         Place_Keyword_Thesaurus: none
         Place Keyword: Nevada
         Place_Keyword: Great Basin
Access_Constraints: None.
Use Constraints:
    Although this Federal Geographic Data Committee (FGDC) compliant metadata file is intended to
    document the data set in nonproprietary form, as well as ArcGIS format, this metadata file may
    include some ArcGIS-specific terminology.
    These data are not intended to be used as a survey product and are for reference purposes only.
    Acknowledgment of the U.S. Geological Survey and the Nevada Division of Environmental
    Protection would be appreciated in products derived from these data.
Point_of_Contact: (Warning: Although accurate at the time of production, this information may have
become obsolete. See the <u>Metadata Reference Information</u> section for a current contact.)
    Contact Information:
         Contact Organization Primary:
              Contact_Organization: U.S. Geological Survey
         Contact_Position: Public Information Assistant
         Contact Address:
              Address Type: mailing and physical address
              Address:
                   333 W. Nye Lane
              City: Carson City
              State or Province: NV
              Postal Code: 89706
              Country: USA
         Contact_Voice_Telephone: (775) 887-7600
         Contact_Facsimile_Telephone: (775) 887-7629
         Contact_Electronic_Mail_Address: GS-W-NVpublic-info@usgs.gov
Data_Set_Credit:
    Compilation of this data set and the associated metadata was done in cooperation with the Nevada
```

Division of Environmental Protection.

Technical review of this data set and metadata was provided by Douglas O. Shipley and Toby L.

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Welborn of the U.S. Geological Survey.
Native Data Set Environment:
    Microsoft Windows XP Version 5.1 (Build 2600) Service Pack 1; ESRI ArcCatalog 9.0.0.580
Cross_Reference:
    Citation_Information:
         Originator: Douglas K. Maurer
         Originator: Susan G. Buto
         Publication_Date: 2006
         Title:
              Depth to ground water contours of hydrographic area 153, Diamond Valley, Nevada
         Geospatial_Data_Presentation_Form: vector digital data
         Online_Linkage: http://water.usgs.gov/lookup/getspatial?sir2006-5100_dtwha153_l
Cross_Reference:
    Citation_Information:
         Originator: Susan G. Buto
         Originator: David M. Evetts
         Originator: Sienna Smith-Sager
         Publication_Date: 2006
         Title:
              Water-table contours of Nevada
         Geospatial_Data_Presentation_Form: vector digital data
         Online Linkage: http://water.usgs.gov/lookup/getspatial?sir2006-5100 wanv l
Cross Reference:
    Citation Information:
         Originator: J. LaRue Smith
         Originator: Toby L. Welborn
         Publication Date: 2006
         Title:
              Water-table altitude of Nevada
         Geospatial_Data_Presentation_Form: raster digital data
         Online_Linkage: http://water.usgs.gov/lookup/getspatial?sir2006-5100_wanv_g
Cross Reference:
    Citation Information:
         Originator: J. LaRue Smith
         Originator: Toby L. Welborn
         Publication_Date: 2006
         Title:
              Depth to ground water of Nevada
         Geospatial Data Presentation Form: raster digital data
         Online Linkage: http://water.usgs.gov/lookup/getspatial?sir2006-5100 dtwnv g
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Data_Quality_Information:
    Attribute_Accuracy:
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Attribute_Accuracy_Report:

All attempts were made to compare 100 percent of the digital spatial data to the original source map. Verification was done by visual and manual comparison, combined with onscreen review, of the source with hard copy plots. Corrections were made until two comparisons determined 100 percent of the digital spatial data matched the original source map.

Logical Consistency Report:

The logical consistency topologically is clean. Chain-node topology is present. Using ArcGIS Workstation commands and routines all arcs were checked for node errors, overshoots, undershoots, dangles, intersections, and duplicate features.

Completeness Report:

Complete at 1:750,000-scale for Nevada.

Positional Accuracy:

Horizontal Positional Accuracy:

Horizontal Positional Accuracy Report:

Errors resulting from the quality of the source map, the automation process, and the scale resolution can impact the accuracy of the data. The errors resulting from the quality of the source map and the automation process are unknown. The inherent error of a 1:750,000-scale map is approximately 320 meters according to the National Map Accuracy Standards of 1947.

Quantitative_Horizontal_Positional_Accuracy_Assessment:

Horizontal Positional Accuracy Value: 350 meters

Horizontal_Positional_Accuracy_Explanation:

The horizontal positional accuracy was verified by visual and manual comparison as described in the Horizontal_Positional_Accuracy_Report and the Process_Steps and matches the positional accuracy of the original source map. The horizontal positional error is deductively estimated at 350 meters.

Lineage:

Source_Information:

Source_Citation:

Citation Information:

Originator: F.E. Rush Publication_Date: 1974

Title:

Static ground water levels of Nevada

Geospatial_Data_Presentation_Form: map

Series_Information:

Series Name: Nevada Department of Conservation and Natural Resources,

Division of Water Resources map Issue Identification: Not applicable

Publication Information:

Publication Place: Carson City, NV

Publisher: Nevada Department of Conservation and Natural Resources, Division

of Water Resources

Source_Scale_Denominator: 750,000 Type_of_Source_Media: paper

Source Time Period of Content:

Time Period Information:

Single Date/Time:

Calendar_Date: 1974

Source Currentness Reference:

publication date

Source Citation Abbreviation:

water-level map

Source Contribution:

spatial and attribute information

Process_Step:

Process Description:

The water-level map was securely taped to a digitizing table and registered to the Lambert conformal conic projection with the parameters set for the Nevada State base map (central meridian = -117°, first standard parallel = 33°00'00", second standard parallel = 45°00'00"), North American Datum 1927 (NAD 27). The contours were digitized directly into the coordinate system using the ArcGIS ArcEdit module and commands. The maximum root mean square error during digitizing was 0.002.

Source Used Citation Abbreviation:

water-level map

Process Date: 200304 - 200306

Process Step:

Process Description:

- 1. 1:750,000-scale hard copy plots of the digitized water-level map were generated. Using a light table, these plots were visually and manually compared with the water-level map.
- 2. Corrections were made to the spatial data until two visual and manual comparisons, combined with on-screen review, determined there was no light between the original and digital lines and the attribute data matched the source map.

- 3. Polygon and line topology were built using the ArcGIS Workstation command CLEAN with the fuzzy tolerance = 0.001 and dangle length = 0.01.
- 4. The data set was projected from Lambert, NAD 27 to UTM, Zone 11, NAD 27 using the ArcGIS Workstation command PROJECT.

Source Used Citation Abbreviation:

water-level map Process_Date: 200308

Process_Step:

Process_Description:

- 1. The attribute DTW750NV_L-ID was calculated to be a unique sequential integer equal to DTW750NV_L#.
- 2. Line topology was built using the ArcGIS Workstation command Build.
- 3. Metadata were structured and validated using metadata tools, MP and CNS, developed by Peter Schweitzer, U.S. Geological Survey.

Process_Date: 200411

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```
Spatial_Data_Organization_Information:
    Direct_Spatial_Reference_Method: Vector
    Point_and_Vector_Object_Information:
        SDTS_Terms_Description:
        SDTS_Point_and_Vector_Object_Type: Complete chain
        Point_and_Vector_Object_Count: 566
    SDTS_Terms_Description:
        SDTS_Point_and_Vector_Object_Type: Point
        Point_and_Vector_Object_Count: 134
    SDTS_Terms_Description:
        SDTS_Point_and_Vector_Object_Type: Point
        Point_and_Vector_Object_Type: Point
        Point_and_Vector_Object_Tount: 134
```

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```
Spatial Reference Information:
    Horizontal_Coordinate_System_Definition:
         Planar:
             Grid Coordinate System:
                  Grid Coordinate System Name: Universal Transverse Mercator
                  Universal_Transverse_Mercator:
                       UTM_Zone_Number: 11
                       Transverse Mercator:
                           Scale_Factor_at_Central_Meridian: 0.999600
                           Longitude_of_Central_Meridian: -117.000000
                           Latitude_of_Projection_Origin: 0.000000
                           False_Easting: 500000.000000
                           False_Northing: 0.000000
             Planar Coordinate Information:
                  Planar_Coordinate_Encoding_Method: coordinate pair
                  Coordinate_Representation:
                       Abscissa_Resolution: 0.005612
                       Ordinate Resolution: 0.005612
                  Planar Distance Units: meters
         Geodetic Model:
             Horizontal_Datum_Name: North American Datum of 1927
             Ellipsoid_Name: Clarke 1866
             Semi-major_Axis: 6378206.400000
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Denominator_of_Flattening_Ratio: 294.978698

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```
Entity_and_Attribute_Information:
    Detailed Description:
         Entity_Type:
              Entity_Type_Label: dtw750nv_l.aat
              Entity_Type_Definition:
                   arc attribute table
              Entity_Type_Definition_Source:
                   ESRI
         Attribute:
              Attribute_Label: FID
              Attribute Definition:
                   Internal feature number.
              Attribute_Definition_Source:
                   ESRI
              Attribute_Domain_Values:
                   Unrepresentable_Domain:
                        Sequential unique whole numbers that are automatically generated.
         Attribute:
              Attribute_Label: Shape
              Attribute_Definition:
                   Feature geometry.
              Attribute_Definition_Source:
                   ESRI
              Attribute_Domain_Values:
                   Unrepresentable_Domain:
                        Coordinates defining the features.
         Attribute:
              Attribute_Label: FNODE#
              Attribute_Definition:
                   Internal node number for the beginning of an arc (from-node).
              Attribute_Definition_Source:
                   ESRI
              Attribute Domain Values:
                   Unrepresentable Domain:
                        Whole numbers that are automatically generated.
         Attribute:
              Attribute_Label: TNODE#
              Attribute Definition:
                   Internal node number for the end of an arc (to-node).
              Attribute_Definition_Source:
                   ESRI
              Attribute_Domain_Values:
                   Unrepresentable Domain:
                        Whole numbers that are automatically generated.
         Attribute:
              Attribute_Label: LPOLY#
              Attribute_Definition:
                   Internal node number for the left polygon.
              Attribute_Definition_Source:
                   ESRI
              Attribute_Domain_Values:
                   Unrepresentable Domain:
                        Whole numbers that are automatically generated.
         Attribute:
              Attribute Label: RPOLY#
              Attribute Definition:
```

```
Internal node number for the right polygon.
    Attribute Definition Source:
         ESRI
    Attribute_Domain_Values:
         Unrepresentable_Domain:
              Whole numbers that are automatically generated.
Attribute:
    Attribute_Label: LENGTH
    Attribute_Definition:
         Length of feature in internal units.
    Attribute_Definition_Source:
         ESRI
    Attribute_Domain_Values:
         Unrepresentable_Domain:
              Positive real numbers that are automatically generated.
Attribute:
    Attribute_Label: DTW750NV_L#
    Attribute_Definition:
         Internal feature number.
    Attribute Definition Source:
         ESRI
    Attribute_Domain_Values:
         Unrepresentable Domain:
              Sequential unique whole numbers that are automatically generated.
Attribute:
    Attribute_Label: DTW750NV_L-ID
    Attribute Definition:
         User-defined feature number.
    Attribute Definition Source:
         ESRI
     Attribute_Domain_Values:
         Unrepresentable Domain:
              Seguential unique whole numbers equal to the value of DTW750NV L#.
Attribute:
    Attribute_Label: DEPTH-FT
    Attribute_Definition:
         The depth to ground water, in feet.
    Attribute Definition Source:
         water-level map
    Attribute_Domain_Values:
         Range_Domain:
              Range Domain Minimum: 10
              Range Domain Maximum: 700
              Attribute_Units_of_Measure: Feet
Attribute:
    Attribute Label: DEPTH-M
    Attribute Definition:
         The depth to ground water in meters. Calculated by multiplying DEPTH-FT by 0.3048.
     Attribute_Definition_Source:
         user-defined
    Attribute_Domain_Values:
         Range Domain:
              Range_Domain_Minimum: 3.048
              Range_Domain_Maximum: 213.36
              Attribute_Units_of_Measure: Meters
Attribute:
    Attribute_Label: CONFIDENCE
    Attribute Definition:
         The confidence level associated with the contour.
    Attribute_Definition_Source:
         water-level map
```

```
Attribute_Domain_Values:
            Enumerated Domain:
                 Enumerated_Domain_Value: little supporting data
                 Enumerated_Domain_Value_Definition:
                     The contour location was estimated based on a small amount of data.
                 Enumerated_Domain_Value_Definition_Source:
                     water-level map
            Enumerated_Domain:
                 Enumerated_Domain_Value: inferred, very little data
                 Enumerated_Domain_Value_Definition:
                     The contour location is inferred and based on very little supporting data.
                 Enumerated_Domain_Value_Definition_Source:
                     water-level map
Overview_Description:
    Entity_and_Attribute_Overview:
        >dtw750nv_l.aat
        >COLUMN ITEM NAME
                                  WIDTH OUTPUT TYPE N.DEC ALTERNATE NAME
                                                                               INDEXED?
        > 1 FNODE#
                                4
                                   5
                                        В
           5 TNODE#
                                4
                                   5
                                        В
           9 LPOLY#
                               4
                                   5
                                        В
          13 RPOLY#
                                4 5
                                        В
          17 LENGTH
                               8 18 F
                                             5
          25 DTW750NV_L#
                                   4
                                       5
                                           В
        > 29 DTW750NV_L-ID
                                   4
                                        5
                                            В
        > 33 DEPTH-FT
                                5
                                    5
                                       Ι
           38 DEPTH-M
                                4
                                    8
                                         F
                                             3
        > 42 CONFIDENCE
                                  30
                                      30
                                           C
        DEPTH-FT is the depth to ground water, in feet, as reported by Rush, 1974.
```

DEPTH-M is the depth to ground water, in meters, calculated by multiplying DEPTH-FT by 0.3048.

CONFIDENCE is the confidence level on the contour as reported by Rush, 1974. Entity_and_Attribute_Detail_Citation: provided above

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```
Distribution_Information:
    Distributor:
         Contact Information:
              Contact_Organization_Primary:
                  Contact_Organization: U.S. Geological Survey
              Contact_Position: Ask USGS -- Water Webserver Team
              Contact Address:
                  Address_Type: mailing address
                  Address:
                       445 National Center
                  City: Reston
                  State_or_Province: VA
                  Postal Code: 20192
              Contact_Voice_Telephone: 1-888-275-8747 (1-888-ASK-USGS)
              Contact_Electronic_Mail_Address: http://water.usgs.gov/user_feedback_form.html
    Resource_Description: Downloadable Data
    Distribution Liability:
```

Although this data set has been used by the U.S. Geological Survey, U.S. Department of the Interior, no warranty expressed or implied is made by the U.S. Geological Survey as to the

accuracy of the data and related materials. The act of distribution shall not constitute any such warranty, and no responsibility is assumed by the U.S. Geological Survey in the use of these data, software, or related materials.

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Standard_Order_Process:
 Digital_Form:
 Digital_Transfer_Information:
 Format_Name: WinZipped ARCE
 Format_Information_Content:
 spatial and attribute information
 File_Decompression_Technique: WinZip
 Transfer_Size: 0.320
 Digital_Transfer_Option:
 Online_Option:
 Computer_Contact_Information:
 Network_Address:
 Network_Resource_Name:

Fees: None. This data set is provided by USGS as a public service.

How To Get the Data

Standard_Order_Process describes the file formats that are available for downloading. One or more data downloads may be available.

For best results download files by right-click/save to disk in your browser. (See guidance on file formats.) http://water.usgs.gov/GIS/dsdl/nv_dtw750tv_l.e00.zip

Save this file to a disk.

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Metadata_Reference_Information: Metadata Date: 20060508 Metadata Contact: Contact Information: Contact_Organization_Primary: Contact_Organization: U.S. Geological Survey Contact_Position: Ask USGS -- Water Webserver Team Contact_Address: Address_Type: mailing address Address: 445 National Center City: Reston State or Province: VA Postal_Code: 20192 Contact_Voice_Telephone: 1-888-275-8747 (1-888-ASK-USGS) Contact_Electronic_Mail_Address: http://answers.usgs.gov/cgi-bin/gsanswers? pemail=h2oteam&subject=GIS+Dataset+nv dtw750nv l Metadata Standard Name: FGDC Content Standards for Digital Geospatial Metadata Metadata_Standard_Version: FGDC-STD-001-1998

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